## Your grade: 100%

Your latest: **100%** • Your highest: **100%** • To pass you need at least 80%. We keep your highest score.

Next item →

**1.** For the the following code: 1 / 1 point

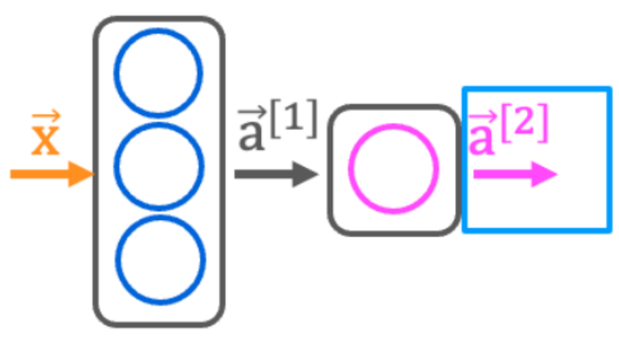
```
model = Sequential([
 Dense(units=25, activation="sigmoid"),
 Dense(units=15, activation="sigmoid"),
 Dense(units=10, activation="sigmoid"),
 Dense(units=1, activation="sigmoid")])
```

This code will define a neural network with how many layers?

- (•) 4
- ( ) 3
- ( ) 25
- ( ) 5

**Correct**
Yes! Each call to the "Dense" function defines a layer of the neural network.

1 / 1 point




```
x = np.array([[200.0, 17.0]])
layer_1 = Dense(units=3, activation='sigmoid')
a1 = layer_1(x)

layer_2 = Dense(units=1, activation='sigmoid')
a2 = layer_2(a1)
```

**2.** How do you define the second layer of a neural network that has 4 neurons and a sigmoid activation?

- ( ) Dense(units=[4], activation=['sigmoid'])
- ( ) Dense(units=4)
- ( ) Dense(layer=2, units=4, activation = 'sigmoid')
- (•) Dense(units=4, activation='sigmoid')

**Correct**
Yes! This will have 4 neurons and a sigmoid activation.

1 / 1 point

Feature vectors

| temperature (Celsius) | duration (minutes) | Good coffee? (1/0) |
|---|---|---|
| 200.0 | 17.0 | 1 |
| 425.0 | 18.5 | 0 |
| ... | ... | ... |

```
x = np.array([[200.0, 17.0]])

[[200.0, 17.0]]
```

**3.** If the input features are temperature (in Celsius) and duration (in minutes), how do you write the code for the first feature vector x shown above?

- ( ) x = np.array([[200.0 + 17.0]])
- ( ) x = np.array([[200.0],[17.0]])
- ( ) x = np.array([['200.0', '17.0']])
- (•) x = np.array([[200.0, 17.0]])

**Correct**
Yes! A row contains all the features of a training example. Each column is a feature.